



DYNACOLOR™ DATA SHEET

GLOW-IN-THE-DARK UV FLEXOGRAPHIC INK

DESCRIPTION

DYNACOLOR™ Glow-in-the-dark UV flexo inks have a light, cream color when they are printed. The pigments are charged by a broad spectrum of wavelengths but ideally with UV light. The charge time varies between 5 and 30 minutes depending on light intensity. After the ink is fully charged the afterglow will last up to 8 hours. Because the pigments have such a high specific gravity the ink must be **stirred well** to ensure uniform pigment distribution.

TYPICAL PROPERTIES

Viscosity (at 25° C, #3 Zahn Cup)	70-100 sec
Density (Approx.)	10.4 lb./gal
Appearance	Viscous Liquid
Percent Solids (Approx.)	99%
Percent Volatiles (Approx.)	<1.0%
Food Contact Compliance Status	Approved for Indirect Food Contact
Yield Range (Approx.)	10,000-75,000 in ² /lb. (depending on film thickness)
Recommended Substrates	Paper, Film

STORAGE AND HANDLING

The inks have excellent stability when stored away from heat. The material is combustible and should not be used near open flame. Store Below 90° F. Should be used within nine months of purchase. Storage longer than twelve months not recommended. Consult product MSDS prior to use.

SPECIAL CARE INSTRUCTIONS

DYNACOLOR™ flexo ink is simple to use, but it is a little different from other UV flexo inks. The differences between our ink and regular UV flexo inks are outlined below. The instructions below should be followed carefully to achieve optimal results. One of the main objectives in this process is to increase the coating weight. Glow-in-the-dark ink has a larger particle size than regular inks. The way to achieve the brightest glow is to get the highest coating weight possible. If you have your own techniques for increasing coating weight, feel free to try them as well.

- Use the smallest anilox number possible. It should be lower than 300. An anilox of below 150 is recommended where high color is desired.
- Use a hard sticky-back.
- Use rubber plates with soft durometer.
- Use very little nip pressure.
- Use a doctor blade instead of a metering roller. If the doctor blade is metallic, be sure the anilox used with the doctor blade is ceramic.
- The viscosity of the formulations varies slightly between colors and will be on the high side. This higher viscosity is by design. The results achieved using this thicker ink will be superior to lower viscosity glow-in-the-dark inks. Lower the viscosity by adding a low viscosity monomer.
- The volume of the cells should be as high as possible.
- Be sure to stir the ink well before and during use. Upon extended storage, the ink may separate. This can be remedied by stirring well before use.

- Clean up with regular solvent. Be sure the press is dry before adding any ink to it.

SENSITIVITY

Glow-in-the-dark materials are fairly stable. However, there are a few considerations that are worth mentioning.

LIGHT: The light fastness of these materials is excellent. This makes the inks suitable for a variety of outdoor applications.

CHEMICALS: Glow-in-the-dark materials are sensitive to water and acid exposure. However, once the ink has been printed and cured/dried, the resins and vehicles provide excellent protection.

CONCLUSION: In short, this ink has good stability and can be used for many applications that were previously not possible.

For further information or assistance, please contact Chromatic Technologies, Inc. at (888) 294-4CTI.

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